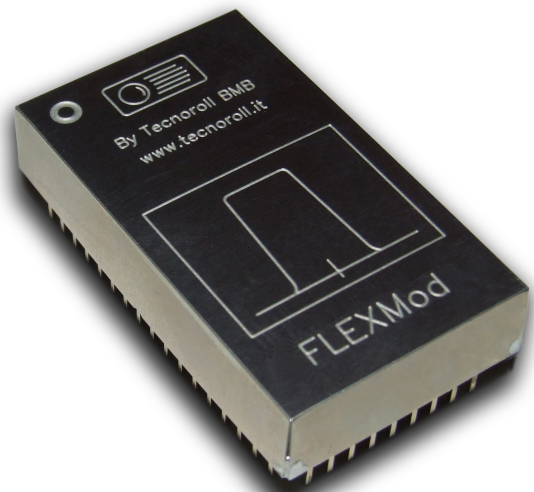




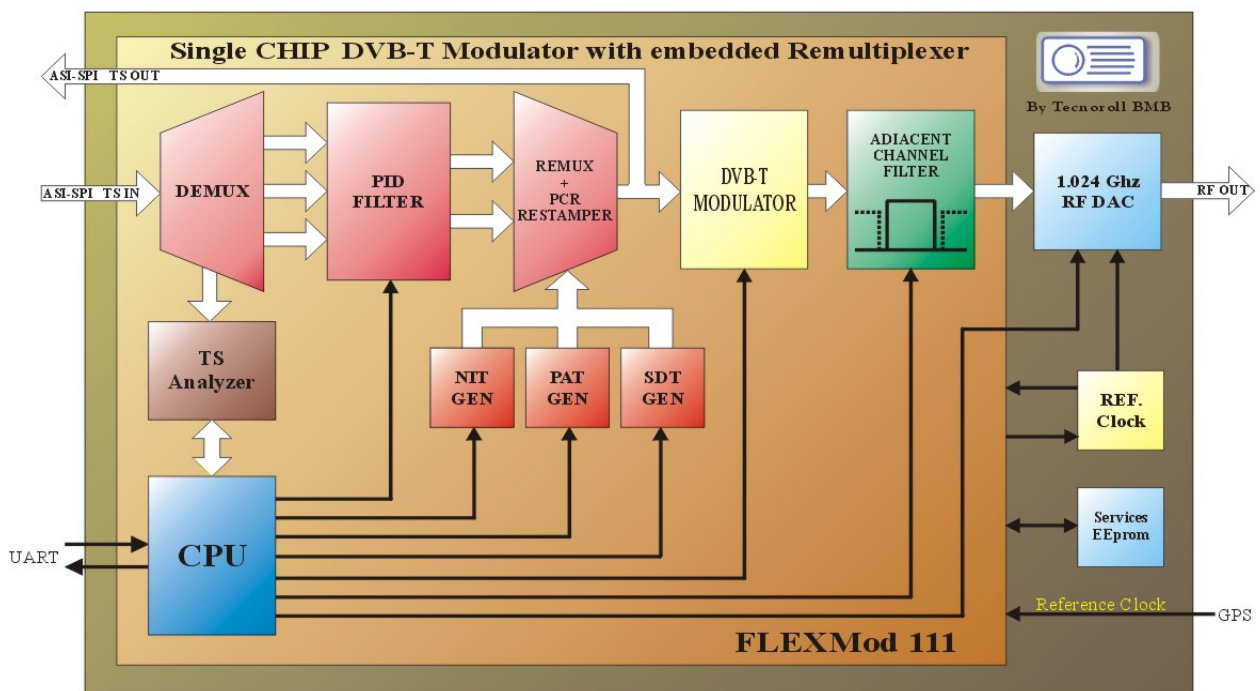
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# FLEXMod 111

## DVB-T Modulator with embedded Remultiplexer



## Distributed in Italy by:



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## General Description

Compact solution for DVB-T modulation: this uModule has a built-in Demultiplexer/Remultiplexer and a DVB-T Modulator.

System includes:

- ASI and SPI TS Inputs
- ASI and SPI TS Outputs
- Automatic recognition, analysis and Demultiplexing of the incoming services
- Visualization of the Input/Output TS bandwidth
- Selection and removal of the unwanted services
- QoS (Quality of Service) function for the selected services
- LCN (Logical Channel Number) Insertion for the selected services
- NIT (Network Information Table) insertion for a correct Bouquet generation
- Automatic service monitoring and PID tracking for the desired services
- SID (Service ID) Remapping for a correct Bouquet generation
- Embedded Remultiplexer for the DVB-T TS reconstruction
- PCR restamper for a correct timing reconstruction
- Non volatile memory for the system configuration
- Easy configuration through asynchronous serial port with high level commands
- No need for additional programming on power-up (once the unit is configured, it works in total autonomy)
- COFDM Modulator : DVB-T/H ETSI EN 300 744 V1.5.1
- Digital reprogrammable filters (Precorrector)
- Support of Hierarchical modulation
- Programmable Cell-ID and others H-modes.
- The internal oscillator can be Locked to an external arbitrary clock source or to a GPS pps reference clock.
- Support to SFN-Link (packet signature for compatibility with DVB-T SFN distribution networks)
- Selectable RF power output up to -7dBm
- Frequency Range 0 - 300 MHz RF out through internal 1 GHz DAC

## Modulator Specification

<b>Modulation type:</b>	COFDM DVB-T (ETSI EN 300 744)
<b>Channel Bandwidth:</b>	6 – 7 – 8 MHz
<b>Carriers:</b>	2K -4K– 8K
<b>Hierarchy:</b>	Alpha 0 – 2 - 4
<b>Constellation:</b>	QPSK 16QAM 64QAM
<b>FEC:</b>	1/2 2/3 3/4 5/6 7/8
<b>Guard Interval:</b>	1/4 1/8 1/16 1/32
<b>Spectrum:</b>	Normal / Inverted
<b>SFN Compatibility mode:</b>	ON / OFF (packet signature for compatibility with DVB-T SFN distribution networks)
<b>PCR Restamper:</b>	ON / OFF
<b>Output Frequency:</b>	0-300 MHz (Internal DDS)
<b>Output Level:</b>	-7 dBm typical
<b>MER:</b>	>49 dB typical @36MHz

## General Specifications

<b>Data Input/Output:</b>	SPI / ASI
<b>Power Supply:</b>	3V3, 1V8, 1V2
<b>Power Consumption:</b>	2,5W
<b>Board Temperature Range:</b>	from 0 to 70° C
<b>Storage Temperature Range:</b>	from -20 to +85° C
<b>Dimensions:</b>	29 x 49,5 x 9,5 mm
<b>Configuration:</b>	Realtime Configuration through Serial Port (LVTTTL)
<b>Weight:</b>	20 gr

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